

3.2 Notes Concerning the Pressure Equipment Directive 97/23 EEC

These actuators are dimensioned as positioning devices in accordance with article 1, section (3.10) of the pressure equipment directive and are therefore no pressure equipment as defined by the EC pressure equipment directive 97/23 EEC.

3.3 Declaration of Manufacturer for Electric Accessories

are – if applicable – enclosed with the delivered accessories.

4 Notes on Safety

4.1 Important Information for the User

The actuators described hereunder have been designed and manufactured in compliance with standards and regulations stipulated above. They therefore comply with the latest technical standards and meet the requirements of these standards.

However, safety during operation in practice can only be achieved if all necessary measures are applied. It is the responsibility of design engineer and operator of pipeline systems equipped with valve and actuator to plan appropriate measures and to monitor their implementation and execution.

In particular the operator must ensure that

- the actuator is only used as described in section 2 <Intended Use>,
- the control medium is compatible with the material of the actuator (anodised aluminium),
- the actuator is only operated in fault-free, fully functional condition and the function of the safety installations in control pressure generation and distribution system and in the electric control provided by the customer are checked at regular intervals,
- all guards and safety installations for electrically and mechanically moved parts of the actuator and its accessory modules are maintained in as-delivered condition and the safety covers of junction boxes are properly closed again after electrical connection,

- only appropriately qualified and authorized personnel plans and connects the actuator, operates the control system and is regularly instructed about all relevant issues concerning local regulations for health and safety at work – also for electrical equipment,
- this person has the necessary equipment available to carry out the work steps described hereunder,
- this person is familiar with these operating instructions and the instructions for the associated valve and observes the information contained therein,
- repairs and conversions on spring reset actuators are only performed under the supervision of a safety expert.

If the information contained in these instructions is not observed, the liability of **Crane Process Flow Technologies GmbH** for the above mentioned products shall become null and void.

4.2 General Safety Regulations

Basically the same safety regulations apply for actuators as well as the equipment for the generation and distribution of control pressure and for the electrical control system they are connected to. Compliance with these regulations is also assumed for operation of the actuator.

The following must be additionally observed, especially for these pneumatic/hydraulic actuators:

- actuators are designed for control pressures of max. 10 bar; compressed air, neutral gas, water or hydraulic oil at room temperature may be used. In order to protect the solenoid valves, the control medium should be filtered with a mesh size of 40 µm (see ISO 8573-1, class 5). Compressed air must be dried and may be slightly oiled for special applications.
- manual emergency actuation of double-acting actuators with double-D on the extension of the control shaft is only permitted if no control pressure is applied to the actuator. For actuation use only exactly fitting open-end spanners.
- manual emergency actuation of spring reset actuators must only be performed using an